Applicant: John J. Light Serial No.: 10/003,209

Filed: October 30, 2001

Page : 3 of 12

Attorney's Docket No.: 10559-538001

Intel Docket No.: P12444

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

(Currently Amended) A method of displaying rendering a virtual three-dimensional
 (3D) scene, comprising:

tracking a positional change of a head of a user with respect to a display; transforming the virtual 3D scene in accordance with the positional change of the head;

and

<u>projecting rendering</u> on the display a transformed virtual 3D scene; <u>wherein the virtual 3D scene is rendered in a perspective projection defined by a frustum</u> <u>bounded by a near plane and by a far plane located opposite the near plane.</u>

2. (Original) The method of claim 1, wherein transforming the virtual 3D scene comprises shifting the virtual 3D scene in a left direction of the user when the head moves in a right direction of the user.

Attorney's Docket No.: 10559-538001 Intel Docket No.: P12444

Serial No.: 10/003,209 Filed: October 30, 200

Applicant: John J. Light

Filed : October 30, 2001 Page : 4 of 12

3. (Original) The method of claim 2, wherein transforming the virtual 3D scene comprises shifting the virtual 3D scene in a right direction of the user when the head moves in a left direction of the user.

- 4. (Currently Amended) The method of claim 3, wherein the <u>a</u> camera is attached to the display.
- 5. (Original) The method of claim 1, wherein transforming the virtual 3D scene comprises increasing a magnification of the virtual 3D scene when the head moves toward the display.
- 6. (Original) The method of claim 5, wherein transforming the virtual 3D scene comprises reducing the magnification of the virtual 3D scene when the head moves away from the display.
- 7. (Original) The method of claim 5, wherein the camera is positioned above the display.
- 8. (Original) The method of claim 3, wherein the virtual 3D scene is shifted with respect to the head by a factor of 10.

Applicant: John J. Light Serial No.: 10/003,209

Filed: October 30, 2001

Page : 5 of 12

9. (Original) The method of claim 1, wherein tracking the positional change of the head further comprises tracking an iridescent color in an object attached to the head.

Attorney's Docket No.: 10559-538001

Intel Docket No.: P12444

10. (Currently Amended) The method of claim 1, wherein transforming the virtual 3D scene comprises decreasing a magnification of the 3d 3D scene when the head moves toward the display and increasing the magnification of the 3D scene when the head moves away from the display.

11. (Currently Amended) An apparatus for displaying rendering a virtual three-

dimensional (3D) scene, comprising:

a memory that stores executable instructions; and

a processor that executes the instructions to:

track a positional change of a head of a user with respect to a display;
transform the virtual 3D scene in accordance with the positional change of the head; and

project render on the display a transformed virtual 3D scene;

wherein the virtual 3D scene is rendered in a perspective projection defined by a frustum bounded by a near plane and by a far plane located opposite the near plane.

Oph

Applicant: John J. Light
Serial No.: 10/003,209

Attorney's Docket No.: 10559-538001
Intel Docket No.: P12444

Serial No.: 10/003,209 Filed: October 30, 2001

Page : 6 of 12

12. (Original) The apparatus of claim 11, wherein to transform the virtual 3D scene comprises to shift the virtual 3D scene in a left direction of the user when the head moves in a right direction of the user.

13. (Original) The apparatus of claim 12, wherein to transform the virtual 3D scene comprises to shift the virtual 3D scene in a right direction of the user when the head moves in a left direction of the user.

14. (Currently Amended) The apparatus of claim 13, wherein the <u>a</u> camera is attached to the display.

15. (Original) The apparatus of claim 11, wherein transforming the virtual 3D scene comprises increasing a magnification of the virtual 3D scene when the head moves toward the display.

16. (Original) The apparatus of claim 15, wherein transforming the virtual 3D scene comprises reducing the magnification of the virtual 3D scene when the head moves away from the display.

17. (Original) The apparatus of claim 15, wherein the camera is positioned above the display.

Applicant: John J. Light

Serial No.: 10/003,209

Filed : C

: October 30, 2001

Page

7 of 12

18. (Original) The apparatus of claim 13, wherein the virtual 3D scene is shifted with respect to the head by a factor of 10.

Attorney's Docket No.: 10559-538001

Intel Docket No.: P12444

19. (Original) The apparatus of claim 11, wherein to track the positional change of the head further comprises to track an iridescent color in an object attached to the head.

20. (Currently Amended) The apparatus of claim 11, wherein to transform the virtual 3D scene comprises to decrease a magnification of the 3d 3D scene when the head moves toward the display and to increase the magnification of the 3D scene when the head moves away from the display.

21. (Currently Amended) An article comprising a machine-readable medium that stores executable instructions for displaying rendering a virtual three-dimensional (3D) scene, the instructions causing a machine to:

track a positional change of a head of a user with respect to a display;

transform the virtual 3D scene in accordance with the positional change of the head; and project render on the display a transformed virtual 3D scene;

wherein the virtual 3D scene is rendered in a perspective projection defined by a frustum bounded by a near plane and by a far plane located opposite the near plane.



Applicant : John J. Light Serial No. : 10/003,209

Filed: October 30, 2001

Page : 8 of 12

22. (Original) The article of claim 21, wherein to transform the virtual 3D scene comprises to shift the virtual 3D scene in a left direction of the user when the head moves in a right direction of the user.

Attorney's Docket No.: 10559-538001

Intel Docket No.: P12444

23. (Original) The article of claim 22, wherein to transform the virtual 3D scene comprises to shift the virtual 3D scene in a right direction of the user when the head moves in a left direction of the user.

24. (Currently Amended) The article of claim 23, wherein the <u>a</u> camera is attached to the display.

25. (Original) The article of claim 21, wherein to transform the virtual 3D scene comprises to increase a magnification of the virtual 3D scene when the head moves toward the display.

26. (Original) The article of claim 25, wherein to transform the virtual 3D scene comprises to reduce the magnification of the virtual 3D scene when the head moves away from the display.

27. (Original) The article of claim 25, wherein the camera is positioned above the display.

Applicant: John J. Light Serial No.: 10/003,209

Filed

: October 30, 2001

Page

: 9 of 12

28. (Original) The article of claim 23, wherein the virtual 3D scene is shifted with respect to the head by a factor of 10.

Attorney's Docket No.: 10559-538001

Intel Docket No.: P12444

29. (Original) The article of claim 21, wherein to track the positional change of the head further comprises to track an iridescent color in an object attached to the head.

30. (Currently Amended) The article of claim 21, wherein to transform the virtual 3D scene comprises to decrease a magnification of the 3d 3D scene when the head moves toward the display and to increase the magnification of the 3D scene when the head moves away from the display.

and.